

No. 896,769.

PATENTED AUG. 25, 1908.

J. A. SMITH.
BURGLAR ALARM.
APPLICATION FILED AUG. 14, 1907.

Fig. 1.

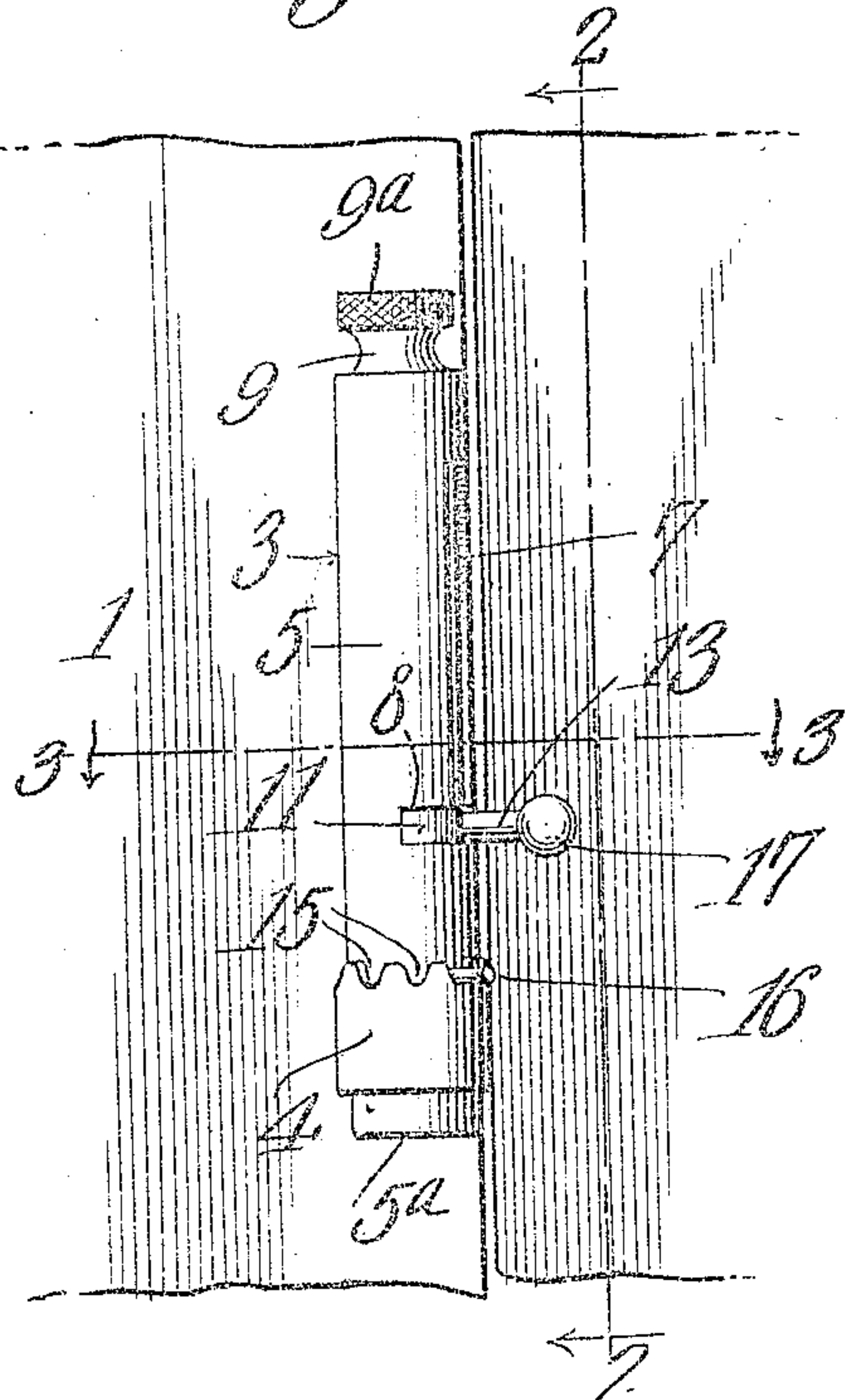


Fig. 2.

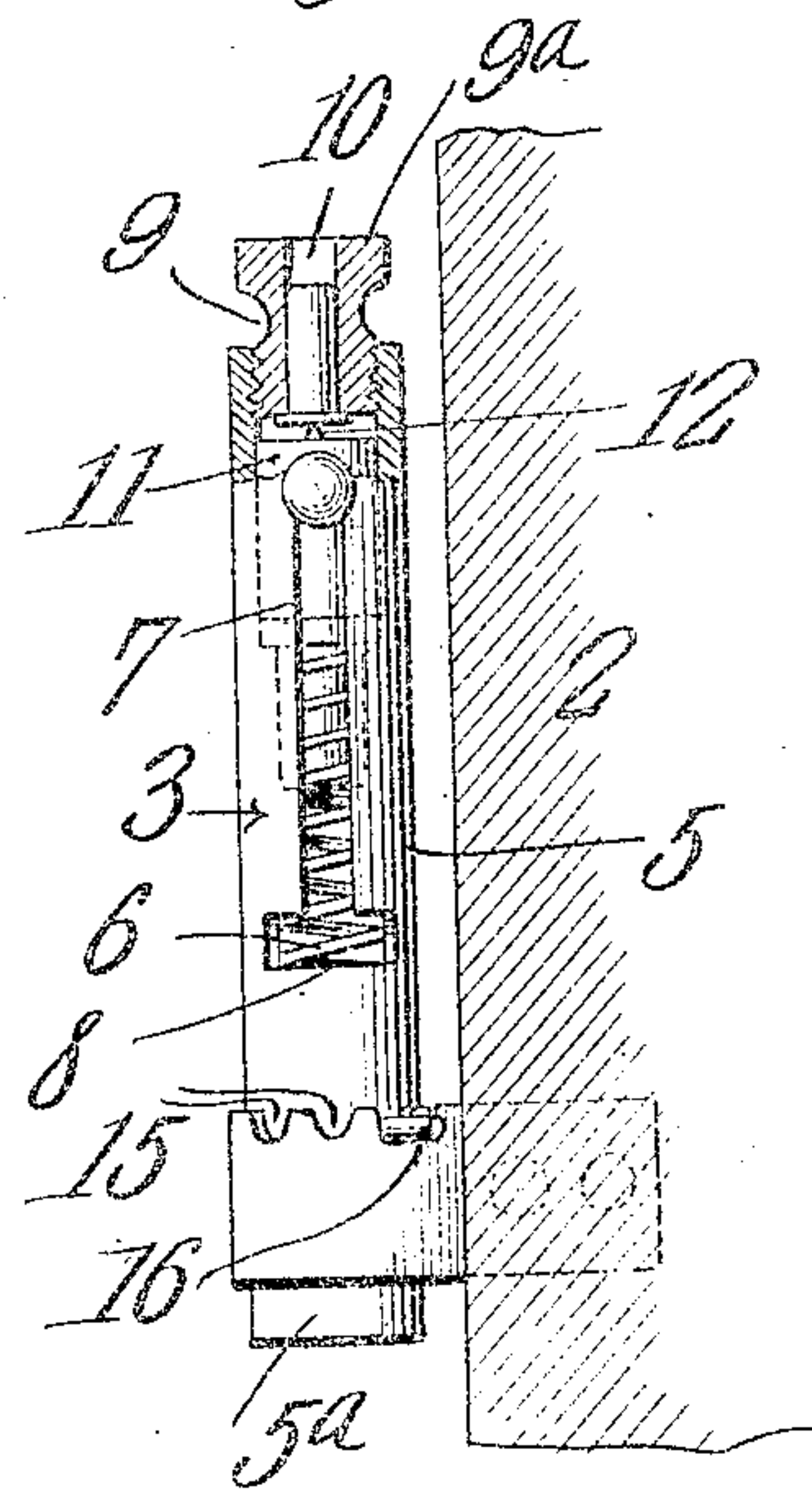
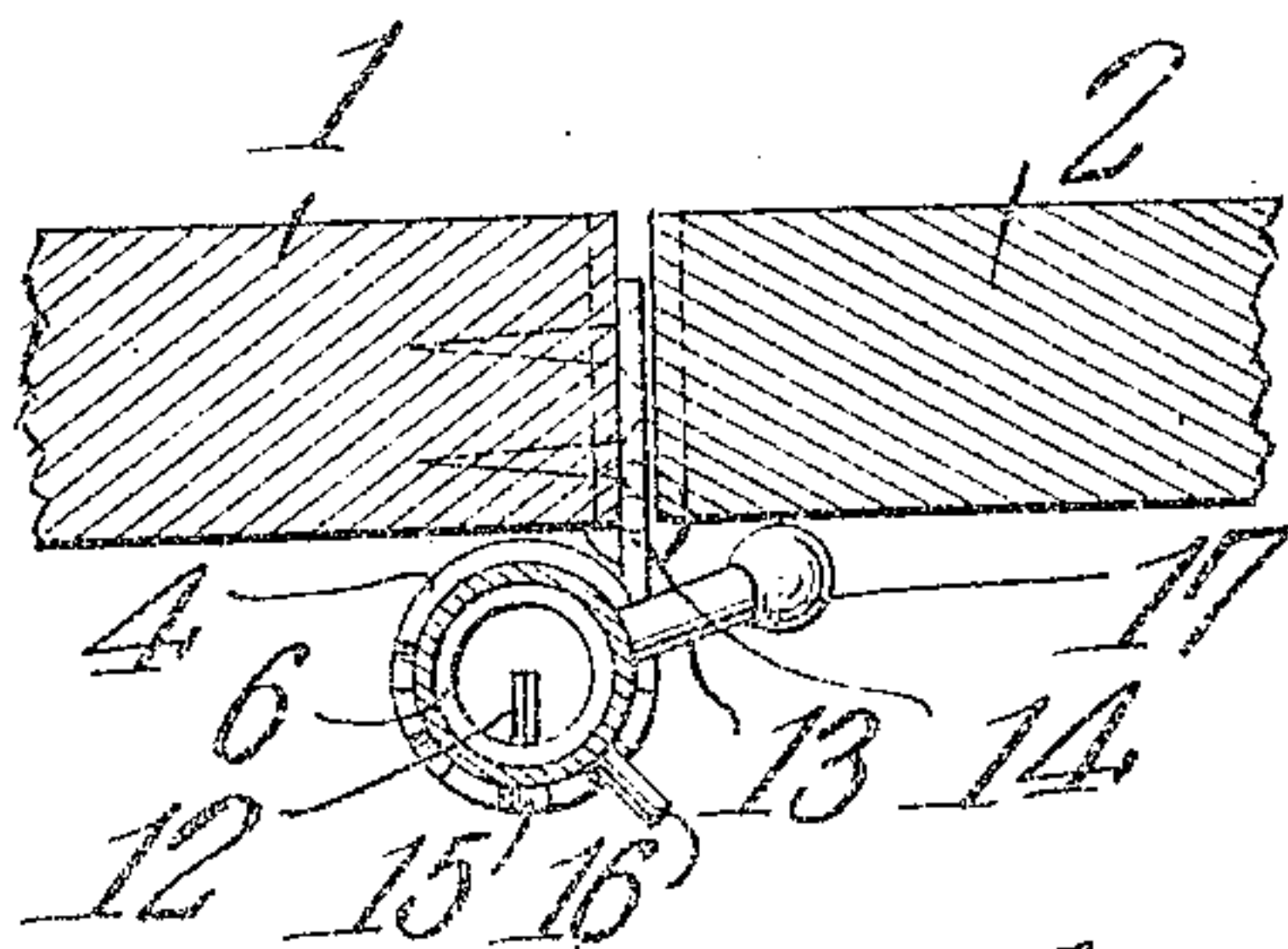


Fig. 3.



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Witnesses

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UNITED STATES PATENT OFFICE.

JOSEPH ARTHUR SMITH, OF DENVER, COLORADO.

BURGLAR-ALARM.

No. 896,769.

Specification of Letters Patent.

Patented Aug. 25, 1908.

Application filed August 14, 1907. Serial No. 388,543.

To all whom it may concern:

Be it known that I, JOSEPH A. SMITH, a citizen of the United States, residing at Denver, in the county of Denver and State of Colorado, have invented a new and useful Burglar-Alarm, of which the following is a specification.

This invention relates to that type of burglar alarms which are attached to the inner or hinged edge of a door or its adjacent jamb and adjusted after the door is closed to cause an explosion should some one attempt to gain admission to the room through an effort to open the door.

The main object of the invention is to provide, in connection with the alarm proper, a holder therefor by means of which the said alarm may be so adjusted that its trip arm will be disengaged immediately upon the opening of the door, or at any period to which the alarm has been set from complete closure to wide open.

In the accompanying drawing:—Figure 1 is an elevation of the improved burglar alarm as it appears when applied to a door in operative position. Fig. 2 is a vertical section of the jamb on the line 2—2 of Fig. 1 looking in the direction of the arrow A, the alarm being in its inoperative position. Fig. 3 is a horizontal section on the line 3—3 of Fig. 1.

Similar reference letters are used on all the figures for designating the same parts.

Let the numeral 1 represent a part of a door, swinging on hinges, attached to a jamb 2. A burglar alarm 3 operated by the opening of the door, is supported in a holder 4 attached to the door or jamb by screws, see Fig. 3.

The burglar alarm proper comprises a cylindrical barrel 5 closed permanently at its lower end 5^a to form a seat for a coil spring 6 placed within the barrel. In one side of the barrel is cut a T shaped slot 7, its head or laterally extending slots 8 being at the bottom of the slot. The upper end of the barrel is threaded internally for the bottom end of a screw plug 9 having a milled or roughened head 9^a for turning it and a hole 10 through its center in which is placed a blank cartridge to be exploded when the alarm is tripped. The screw plug 9 projects a short distance above the top of the barrel 5 and about the same distance within it.

Slidable within the upper part of barrel 5 is a plug or hammer 11 having a projection 12 on its upper surface to strike the cartridge

and explode it when the trip lever is actuated. A short distance below the top of the hammer 11 and attached thereto is a trip arm 13 projecting through the longitudinal portion of the slot 7 at its upper end. Between the bottom of the hammer 7 and the bottom 5^a of the barrel 5 is the coil spring 6 which is compressed when the hammer is drawn down by the trip arm 7 and held compressed when the trip arm is turned to the right or left into one of the lateral portions 8 of the T shaped slot 7.

The alarm holder 4 is circular in plan view and of just sufficient size to admit the barrel 5 and permit it to extend a short distance below its bottom edge. An arm 14 attached to the holder is fastened by one or more screws to the hinged edge of the door 1, see Fig. 3, or if desired it may be secured to the jamb in the same way. The top edge of the holder is provided with notches 15 for a pin 16 projecting from the side of the barrel 6 at the proper height and position.

To operate the alarm, the trip arm is drawn down and caught in one of the side slots 8, the plug is then unscrewed and a blank cartridge placed in the hole 10 therein and the plug returned to place. Assuming that the holder is attached to the door, the burglar alarm is inserted in the holder 4, if the cartridge is to be exploded before the door opens many inches, in such manner that the head 17 of the trip arm 13 will rest against the jamb 2 and the pin 16 enter one of the notches 15 in the upper edge of the holder 4 to prevent the barrel turning.

If the alarm is not to be sounded until the door is opened wider, the trip arm will not be placed so close to the door and the pin 16 will enter another one of the notches 15. When the holder is attached to the jamb, the arm 13 will rest against the door.

A further reason for making the burglar alarm adjustable around its axis in the holder is because door frame moldings have different conformations and project at varying distances beyond the plane of the door. Therefore if the connection between the burglar alarm and its holder were not an adjustable one, it would at times be practically impossible to use the device because the arm 13 would be tripped by the projecting molding of the door frame before the barrel of the alarm could be seated; or if set for moldings of this type, the door could be opened with impunity for a certain distance when the door frame moldings are flat. Again, if it be

desired to ventilate a room, or for any other reason it is deemed best to have the door remain open a short distance, this is rendered possible by the adjustable connection between the burglar alarm and its holder as will be easily understood.

I claim:—

10 In a burglar alarm, the combination of a cylindrical barrel having a cartridge holder at one end, a spring operated plug within the barrel for discharging the cartridge, a trip arm for releasing said plug and a pin projecting from said barrel, with a holder for said barrel provided with an arm for attaching

the same between the edge of a door and the door joint and having a series of notches therein for engaging said pin and holding the barrel while so engaged against turning in said holder and the trip arm at different angular positions in respect to the plane of said arm. 15 20

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

JOSEPH ARTHUR SMITH.

Witnesses:

E. W. ELWELL,
J. MAUDE TRUSTY